RANGER MINUTE: The Campsite Story

Hello and welcome to Glacier Bay National Park. I'm Ranger Jeff Pietka, and this is another edition of Glacier Bay Ranger Minutes.

Glacier Bay was established in 1925 as a National Monument following the work of Dr. William Skinner Cooper, who studied the process by which life comes back to the land following the retreat of glaciers here in Glacier Bay National Park glaciers over the last 250 years. In order to experience the return of life to this land, imagine pitching your tent alongside one of our retreating glaciers on a rocky plain devoid of life. Your trip begins on the day of birth of land that the glacier has just revealed in its retreat, and you're going to need plenty of provisions because you're going to camp on that spot for 250 years so bring a deck of cards and some good reading!

Camping here may seem a bit monotonous, as it'll be at least a year before you'll see any colors besides the white ice, and gray rocks around you. In time though, lichens will grow, as well as mosses, and with luck a few tufts of grass. Also at this time, you'll notice that the glacier has given you noticeably more space in which to go on your daily rambles. A decade or two later, your wildflowers and grasses may be joined by small deciduous shrubs, but you're still a few years away from any type of shade. Sitka alder and willow shrubs sprout up, and alder in particular becomes one of the most important links in the chain of forest succession, as it provides a key nutrient to this thin, slowly-developing soil.

Nitrogen exists in our world primarily as a gas, making up about 80% of the Earth's atmosphere. The wildflowers, and these alder, use bacteria that grow on its roots to pull nitrogen from the air and make it available to the plant. The alder uses this nitrogen energy to produce leaves and to grow. When it drops its leaves and they decompose that Nitrogen becomes available for other future plants to use in a solid state. Any plants that grow beyond these alder will be relying heavily on the nitrogen created by them.

After a half a century of camping in glacier country, you've grayed a little bit, and lost some of that energy to explore the wilderness. You've missed weddings, holidays and graduations, and that glacier you used to sleep right next to is a distant memory. But on the plus side your campground is softer and shadier with a thick layer of moss below and thickets of alder above. At approximately this 50-year mark, the first evergreen trees will arrive developing over the coming centuries into a mature forest of sitka spruce and western hemlock trees. Over

the following centuries these saplings will become a mature forest, surrounding you with Sitka Spruce and Western Hemlock trees.

You may have grown tired of hot dogs and S'mores, but you have witnessed first-hand the process by which life comes back to the land following the retreat of the glaciers here in Glacier Bay National Park. This is the same study to which Dr. William Skinner Cooper dedicated his life culminating in the protection of this land, first as a National Monument and now a National Park.

Thank you for joining me today; this has been another edition of Glacier Bay Ranger Minutes.